IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

LAMBDA OPTICAL SOLUTIONS, LLC,)
Plaintiff,)
v.)
ALCATEL-LUCENT USA INC. and ALCATEL-LUCENT HOLDINGS INC.,)))
Defendants.)) Civil Action No. 10-487-RGA-CJB
ALCATEL-LUCENT USA INC. and ALCATEL-LUCENT HOLDINGS INC.,))))
Counter-Claimants,)
v.)
LAMBDA OPTICAL SOLUTIONS, LLC, LAMBDA OPTICAL SYSTEMS CORP., and ANASTASIOS TZATHAS,))))
Counter-Defendants.)

REPORT AND RECOMMENDATION

In this patent case filed by Plaintiff Lambda Optical Solutions, LLC ("Lambda" or "Plaintiff") against Defendants Alcatel-Lucent USA Inc. and Alcatel-Lucent Holdings Inc. (collectively, "Alcatel" or "Defendants"), Plaintiff alleges infringement of U.S. Patent No. 6,973,229 ("the '229 patent"). Alcatel timely answered Plaintiff's Complaint, and asserted counterclaims against Lambda, Lambda Optical Systems Corporation ("LOS"), and Anastasios Tzathas (collectively, "Counter-Defendants"), one of the named inventors of the '229 patent. Presently before the Court is Defendants' Motion for Summary Judgment of Invalidity ("Motion"). (D.I. 363) For the reasons set out below, the Court recommends that Defendants'

Motion be DENIED.

I. BACKGROUND

A. The Parties

Lambda is a Delaware limited liability company with its principal place of business in Newport Beach, California. (D.I. 1 at ¶ 1) Defendants are Delaware corporations, with their principal places of business in New Jersey and Texas, respectively. (D.I. 74 at 9 at ¶¶ 1, 2) Counter-Defendant LOS is a Delaware corporation with its principal place of business in Reston, Virginia. (*Id.* at ¶ 5) Counter-Defendant Mr. Tzathas is an individual residing in New Market, Maryland. (*Id.* at 10 at ¶ 6)

B. The '229 Patent

The '229 patent is entitled "Node Architecture for Modularized and Reconfigurable Optical Networks, and Methods and Apparatus Therefor," and was issued on December 6, 2005. (D.I. 178, ex. B)¹ The '229 patent lists three inventors: Mr. Tzathas, Moon W. Kim and Abdella Battou. (*Id.*) Counter-Defendant LOS is the sole assignee of the '229 patent, and Plaintiff is its exclusive licensee. (D.I. 1 at ¶¶ 32, 33) The '229 patent is based on U.S. Application No. 09/795,950, which was filed on February 28, 2001. The '229 patent contains thirty claims, four of which are independent (i.e., claims 1, 25, 26 and 27), and forty-nine figures.

The '229 patent relates to the field of optical networking, which involves transmitting voice, Internet traffic, and other digital data over fiber-optic cables. Systems that operate in this field convert electrical signals from one endpoint into optical signals (or light pulses) for

The '229 patent appears several times on the docket, including as an exhibit to the parties' Joint Claim Construction Chart. (D.I. 178, ex. B) Further citations will simply be to the "'229 patent."

transmission along fiber-optic cables. After transmission, the light pulses are converted back to electrical signals at another endpoint, so that they can be received by a network user.

Optical signals are often physically combined, or "multiplexed," for fiber-optic transmission over a single, high-speed "long-haul" fiber—a fiber cable that can transmit those signals over long distances. In wavelength division multiplexing ("WDM"), a fiber is shared by dividing the spectrum of light (or "wavelengths" of light). These "wavelength divisions" must be sufficiently spaced apart to prevent the multiple wavelengths from interfering with each other. The International Telecommunications Union ("ITU") has adopted standard wavelength spacing that should be used for such multiplexing, which is reflected in the "ITU grid." (*See* '229 patent, col. 18:9–11 ("The ITU grid specifies the minimum spacing and the actual wavelengths of the individual wavelengths in a WDM system.")) A wavelength that conforms to the ITU grid is considered "compliant." (*See*, e.g., id., col. 5:63–64)

The '229 patent is directed to one aspect of optical networking: an optical transport switching system.² In both of the asserted independent claims (i.e., claims 1 and 25) of the '229 patent, the claimed optical transport switching system has five subsystems, as highlighted below in claim 1:

An optical transport switching system for use in an optical network, comprising:

an *optical access ingress subsystem* which is adapted to receive an optical signal associated with an access network;

an optical access egress subsystem;

In the fiber-optics context, a switching system (or "switch") is generally defined as "[a] mechanical, electrical, or optical device that breaks or completes a path in a circuit, or changes the path." (D.I. 192, ex. 2 at 899)

a transport ingress subsystem;

a transport egress subsystem;

and an *optical switch subsystem* which is adapted to ingress the optical signal into the optical network by optically coupling the optical access ingress subsystem to the transport egress subsystem and which is adapted to selectively provide optical coupling between the transport ingress subsystem and at least one of (1) the optical access egress subsystem, and (2) the transport egress subsystem.

('229 patent, col. 54:22–37 (emphasis added)) Asserted independent claim 25 closely tracks the language of claim 1, except that instead of focusing on the two ingress subsystems, it has a description of the two egress subsystems:

An optical transport switching system for use in an optical network, comprising:

an optical access ingress subsystem;

an *optical access egress subsystem* which is adapted to direct the optical signal toward an access network;

a transport ingress subsystem;

a transport egress subsystem;

and the *optical switch subsystem* is adapted to egress an optical signal from the optical network by optically coupling the optical signal from the transport ingress subsystem to the optical access egress subsystem and is adapted to selectively provide optical coupling between the transport egress subsystem and at least one of (1) the optical access ingress subsystem and (2) the transport ingress subsystem.

(*Id.*, col. 56:28–42 (emphasis added))

C. Procedural Posture

Plaintiff's Complaint, which was filed on June 4, 2010, originally alleged infringement

against 20 Defendants (D.I. 1); other than Alcatel, all of the other originally named Defendants have been dismissed by stipulation. On January 24, 2011, Alcatel timely answered Plaintiff's Complaint, and asserted counterclaims against Counter-Defendants. (D.I. 74) On March 28, 2012, this case was referred to the Court by Judge Richard G. Andrews for the Court to hear and resolve all pretrial matters, up to and including the resolution of case-dispositive motions. After a hearing, (D.I. 215), the Court issued a Report and Recommendation on claim construction on August 3, 2012, (D.I. 234). Judge Andrews overruled objections to that Report and Recommendation on April 11, 2013. (D.I. 325) Briefing on the pending Motion was completed on January 8, 2014, and the Court held oral argument on the Motion (and other pending Motions) on March 5, 2014. (D.I. 436, hereinafter "Tr.")

II. STANDARD OF REVIEW

A grant of summary judgment is appropriate where "the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party bears the burden of demonstrating the absence of a genuine issue of material fact. *See Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 585 n.10 (1986). If the moving party meets this burden, the nonmovant must then "come forward with specific facts showing that there is a *genuine issue for trial.*" *Id.* at 587 (emphasis in original) (internal quotation marks omitted). If the nonmoving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322-23 (1986). During this process, the Court will "draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the

evidence." Reeves v. Sanderson Plumbing Prods., Inc., 530 U.S. 133, 150 (2000).

However, in order to defeat a motion for summary judgment, the nonmoving party must "do more than simply show that there is some metaphysical doubt as to the material facts." Matsushita, 475 U.S. at 586-87; see also Podobnik v. U.S. Postal Serv., 409 F.3d 584, 594 (3d Cir. 2005) (party opposing summary judgment "must present more than just bare assertions, conclusory allegations or suspicions to show the existence of a genuine issue") (internal quotation marks and citation omitted). The "mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247-48 (1986) (emphasis in original). Facts that could alter the outcome are "material," and a factual dispute is genuine only where "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Id. at 248. "If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted." Id. at 249-50 (internal citations omitted). A party asserting that a fact cannot be—or, alternatively, is—genuinely disputed must support the assertion either by citing to "particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for purposes of the motion only), admissions, interrogatory answers, or other materials"; or by "showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact." Fed. R. Civ. P. 56(c)(1)(A) & (B).

III. DISCUSSION

In this Motion, Alcatel asserts that independent claims 1 and 25, and dependent claims 2,

4-9, 11-16, 18 and 23-24, are anticipated by four published articles that describe various aspects of the MONET project³ (the "MONET articles"). (D.I. 365 at 4, 7-8) In the alternative, Alcatel argues that these claims are obvious in view of the MONET articles. (*Id.* at 17) Lambda responds that the MONET articles do not anticipate the asserted claims and do not render those claims obvious, and presents a number of arguments in support. (D.I. 392)

"Anticipation, though a question of fact, may be resolved on summary judgment if no genuine issue of material fact exists." *OSRAM Sylvania, Inc. v. Am. Induction Techs., Inc.*, 701 F.3d 698, 704 (Fed. Cir. 2012). ""Summary judgment is proper if no reasonable jury could find that the patent is not anticipated." *Id.* (quoting *Zenith Elecs. Corp. v. PDI Commc 'n Sys., Inc.*, 522 F.3d 1348, 1357 (Fed. Cir. 2008)). Similarly, "'a district court can properly grant, as a matter of law, a motion for summary judgment on patent invalidity when the factual inquiries into obviousness present no genuine issue of material facts." *Plantronics, Inc. v. Aliph, Inc.*, 724 F. 3d 1343, 1353 (Fed. Cir. 2013) (quoting *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 716 (Fed. Cir. 1991)). Patents are presumed to be valid, and invalidity must be proven by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238, 2242 (2011).

The Court will address Alcatel's two contentions in turn.

A. Anticipation

Alcatel's primary contention is that each of the MONET articles anticipate the asserted claims. A claim is anticipated under 35 U.S.C. § 102(a) or (b) if:

The MONET project was a five-year research project, lasting from approximately December 1994 through November 1999, which was undertaken by five technology companies (including an Alcatel predecessor company) and several government agencies. (D.I. 370, ex. 1 at A002; D.I. 365 at 1-2; D.I. 392 at 2) The project investigated the viability of wavelength division multiplexing. (D.I. 370, ex. 1 at A002)

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States

35 U.S.C. § 102.⁴ A patent claim is anticipated if each and every limitation is found, either expressly or inherently, in a single prior art reference. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009); *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1321-22 (Fed. Cir. 2003). This test mirrors, to some extent, the test for infringement, and "it is axiomatic that that which would literally infringe if later anticipates if earlier." *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1378 (Fed. Cir. 2001). In order to anticipate, however, a reference must enable one of skill in the art to make and use the invention without undue experimentation, *In re Gleave*, 560 F.3d at 1334 (citing *Impax Labs., Inc. v. Aventis Pharms. Inc.*, 545 F.3d 1312, 1314 (Fed. Cir. 2008)), and must also "show all of the limitations of the claims arranged or combined in the same way as recited in the claims[,]" *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1370 (Fed. Cir. 2008).

A threshold dispute here is whether the MONET articles' disclosures are enabled for Section 102 purposes. The United States Court of Appeals for the Federal Circuit has stated that prior art references—like the MONET articles here—"cannot anticipate a claimed invention 'if

The Court will rely upon the version of 35 U.S.C. § 102 in effect prior to passage of the Leahy-Smith America Invents Act ("AIA"); this prior version of Section 102 applies to all patents with an effective filing date of on or before March 16, 2013, including the asserted patent in this action. See Solvay S.A. v. Honeywell Int'l Inc., 742 F.3d 998, 1000 n.1 (Fed. Cir. 2014) (noting that the "AIA amendments apply only to applications and patents with an effective filing date of March 16, 2013, or later").

the allegedly anticipatory disclosures cited as prior art are not enabled." *In re Antor Media Corp.*, 689 F.3d 1282, 1287 (Fed. Cir. 2012) (quoting *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1354 (Fed. Cir. 2003)). Lambda argues that the MONET articles' disclosures are not enabled, and thus cannot anticipate the claims of the '229 patent. (*See D.I.* 392 at 14)

In taking up this issue, the parties first dispute the legal question as to whether there is a presumption that prior art publications are enabled. (*See* D.I. 392 at 7-8; D.I. 414 at 4 n.5; Tr. at 27-32, 50-52) The Federal Circuit has held that there is a presumption that both claimed and unclaimed disclosures in prior art patents are enabled when an examiner cites them as prior art anticipating a claimed invention, *see Amgen Inc.*, 314 F. 3d at 1355 & n.22, a presumption that applies at the district court as well, *see SD3*, *LLC v. Rea*, — F. Supp. 3d —, 2014 WL 5319773, at *7 (D.D.C. Oct. 20, 2014) (citing *In re Antor Media*, 689 F.3d at 1288). The Federal Circuit has also held that during patent prosecution, a prior art printed publication relied upon by an examiner is presumptively enabling. *See In re Antor Media*, 689 F.3d at 1288. The Federal Circuit has not, however, had occasion to rule on whether this presumption of enablement would similarly apply to prior art printed publications that a party relies upon in a district court proceeding in order to demonstrate that claims of a patent are anticipated. *See Robocast, Inc. v. Apple Inc.*, 39 F. Supp. 3d 552, 565 (D. Del. 2014).

On this score, the Court agrees with the approach taken in *Robocast, Inc. v. Apple Inc.*, 39 F. Supp. 3d 552 (D. Del. 2014). In *Robocast*, this Court held that it "cannot see any logical reason to distinguish between unclaimed disclosures in a prior art patent and the disclosures in a prior art printed publication" and that therefore "a district court should presume that a prior art

printed publication is enabled." *Robocast, Inc.*, 39 F. Supp. 3d at 565. The Court concurs, and thus should initially presume that the MONET articles are enabled.⁵

However, the *Robocast* Court, in ruling on the defendant's motion for summary judgment regarding invalidity (in which the defendant argued that a prior art publication anticipated certain claims in the asserted patent), went on to explain that its inquiry did not "end with the presumption" that the prior art publication is enabled. *Id*.⁶ In that case, the plaintiff put forward evidence in the form of expert testimony that the prior art publication was not enabling; the *Robocast* Court found this evidence sufficient to create a material dispute of fact as to whether the reference was enabled. *Id*. Thus, the *Robocast* Court found that summary judgment of anticipation as to the asserted claims was inappropriate. *Id*. The Court finds that similar circumstances present themselves in this case, for the reasons set out below.

The Court will focus herein on the parties' validity dispute relating to the claim term "access network." The asserted independent claims require that the optical access ingress subsystem and optical access egress subsystem disclosed in claims 1 and 25, respectively, be "adapted to receive an optical signal associated with *an access network*" (i.e., claim 1) or "adapted to direct the optical signal toward *an access network*" (i.e., claim 25). (See '229 patent,

The MONET articles were presented to the PTO in *ex parte* reexamination proceedings. (D.I. 392 at 4 (citing D.I. 395, ex. 3 at A12-38, ex. 5 at A65-81))

Our Court has suggested that the effect of the presumption of enablement in cases like this one is to indicate that "even if the patentee is required to present some evidence of nonenablement, the burden still rests on the party asserting invalidity to ultimately demonstrate by clear and convincing evidence that the prior art is enabled." *Robocast, Inc.*, 39 F. Supp. 3d at 565 (quoting *Forest Labs., Inc. v. Ivax Pharm., Inc.*, 438 F. Supp. 2d 479, 487 n.3 (D. Del. 2006), *aff'd*, 501 F.3d 1263 (Fed. Cir. 2007)).

cols. 54:24-26, 56:31-32 (emphasis added))⁷ Lambda argues that the MONET articles do not anticipate the asserted claims because, *inter alia*, they do not disclose an access network (and thus, do not disclose, as is required by the asserted claims, subsystems adapted to exchange signals with access networks). (D.I. 392 at 9-13)⁸ Instead, Lambda claims that "MONET was not focused on how to extract or insert [optical] signals to and from an access network[,]" and, resultingly, the "MONET articles . . . describe how the network elements were connected directly to *testbed* equipment (such as HDTV equipment, Panasonic Tape Deck, Pentium Workstation), and not an access network." (*Id.* at 1, 13 (emphasis in original)) Alcatel responds by suggesting that because the MONET articles disclosed "a working testbed built to simulate [access network] conditions by companies that built our nation's largest networks[,]" this means that, "for all present invalidity intents and purposes, [the disclosure of the working testbed] is the same as disclosure of a working commercialized [access] network." (D.I. 414 at 5; *see id.* at 6 ("creating an expensive transport network is of no value without access networks to provide data to, and receive data from, end users"))

Lambda's response to that argument is what implicates the question of enablement.

Lambda contends that even if what Alcatel says above as to the disclosure of an access network is correct, the MONET articles do not anticipate because they are not enabling on this score.

An "access network" is "a network external to the optical network." (D.I. 234 at 45) An "optical access ingress subsystem" is "a subsystem for receiving one or more optical signals, originating from an access network, which are compliant with the optical network." (*Id.*) And an "optical access egress subsystem" is "a subsystem for directing one or more optical signals, which are compliant with the optical network, toward an access network." (*Id.*)

Alcatel is correct that "the claims do not require an access network—only the capability of the switch subsystem to direct optical signals to or receive optical signals from an access network." (D.I. 414 at 2 n.3; Tr. at 12, 14-15)

Lambda suggests that the soundness of its argument here is demonstrated by, *inter alia*, the fact that from the November 1999 completion date of the MONET project it took Alcatel "nearly three more years before it was able to introduce, in March of 2002, a commercial optical networking product incorporating the inventions of the '229 patent." (D.I. 392 at 14)

As noted above, the Federal Circuit has held that a prior art publication is enabling for anticipation purposes only if it allows "one of ordinary skill in the art to make or carry out the claimed invention without undue experimentation." *See Elan Pharms., Inc. v. Mayo Found. for Med. Educ. & Research*, 346 F.3d 1051, 1054 (Fed. Cir. 2003) (internal quotation marks and citations omitted). "Whether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations." *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1378 (Fed. Cir. 2009) (quoting *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988)). Among the factors that may be considered in this calculus (the "*Wands* factors") is "the quantity of experimentation necessary" to practice the invention. *In re Wands*, 858 F.2d at 737.9 On that score, "failures by those skilled in the art (having possession of the information disclosed by the publication) are strong evidence that the disclosure of the publication was nonenabling." *In re Donohue*, 766 F.2d 531, 533 (Fed. Cir. 1985); *see, e.g., Freeman v. Minn. Mining & Mfg. Co.*, 675 F. Supp. 877, 886 (D. Del. 1987)

Other of the *Wands* factors include: the amount of direction or guidance present; the presence or absence of working examples; the nature of the invention; the state of the prior art; the relative skill of those in the art; the predictability or unpredictability of the art; and the breadth of the claims. *In re Wands*, 858 F.2d at 737. A court need not consider every one of the *Wands* factors in its analysis; rather, a court is only required to consider those factors relevant to the facts of the case. *See Streck, Inc. v. Research & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1288 (Fed. Cir. 2012) (citing *Amgen, Inc. v. Chugai Pharm. Co., Ltd.*, 927 F.2d 1200, 1213 (Fed. Cir. 1991)).

(quoting this passage from *In re Donohue* and concluding that a genuine issue of fact as to enablement existed, such that denial of the defendant's motion for summary judgment regarding invalidity was appropriate, because of evidence that the author of a prior art publication had not "perfected the technique" referenced in the prior art publication). The Federal Circuit has held that the quantity of experimentation necessary to practice an invention supported a conclusion of nonenablement where, for example, "eighteen months to two years' work was required to practice the patented invention." *Cephalon, Inc. v. Watson Pharms., Inc.*, 707 F.3d 1330, 1339 (Fed. Cir. 2013) (citing *White Consol. Indus., Inc. v. Vega Servo-Control, Inc.*, 713 F.2d 788, 791 (Fed. Cir. 1983)).

Here, it is not disputed that Alcatel had the benefit of the "information disclosed in the MONET articles" starting in November 1999, when the MONET project ended. Yet, at that time, Alcatel admits that the company did not have a "reconfigurable optical networking product[.]" (D.I. 397, ex. 46 at 26, 194 (Alcatel's chief technical officer testifying that as of October 30, 2000, the company "did not have a reconfigurable optical networking product")) And even though Alcatel eventually introduced a commercial optical networking product, as Lambda argues, Alcatel's failure to do so until 2002 amounts to record evidence that the MONET articles were not enabling. (D.I. 392 at 14 (citing D.I. 222 at 20 at ¶ 64))¹⁰

Because more than two years elapsed from when Alcatel first had benefit of the

In its reply brief, Alcatel does not appear to directly address this portion of Lambda's lack of enablement argument. Alcatel contends only that the MONET project was both "large-scale" and "successful[.]" (D.I. 414 at 5) Even if true, these assertions do not address the heart of Lambda's argument—that the MONET articles did not enable a "commercial optical networking product incorporating the inventions of the '229 patent." (D.I. 392 at 14) Indeed, according to Lambda, Alcatel's expert report "lacks any analysis whatsoever in terms of whether these MONET articles were enabled." (Tr. at 27; see also id. at 28)

information disclosed in the MONET articles to when Alcatel introduced a commercial optical networking product, the Court finds that there is a genuine issue of material fact as to whether the MONET articles are enabled. Thus, summary judgment is not appropriate as to Alcatel's contention that the MONET articles anticipate the asserted claims.¹¹

B. Obviousness

In the alternative, Alcatel argues that the asserted claims are invalid as obvious in view of the MONET articles. (D.I. 365 at 17-20; D.I. 414 at 9-10) An invention cannot be patented "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a); 12 see also Helios Software, LLC v. SpectorSoft Corp., C.A. No. 12-081-LPS, 2014 WL 4796111, at *13 (D. Del. Sept. 18, 2014). Generally, a party seeking to invalidate a patent as obvious must demonstrate "by clear and convincing evidence that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so." Procter & Gamble Co. v. Teva Pharm. USA, Inc., 566 F.3d 989, 994 (Fed. Cir. 2009)

Because the Court has found that summary judgment cannot be granted in Alcatel's favor with respect to independent claims 1 and 25, there is no need to address Alcatel's other anticipation-related argument regarding claims 13-16, which depend from claim 1. (D.I. 365 at 12-14; D.I. 414 at 7-9); see, e.g., Mars, Inc. v. JCM Am. Corp., Civil Action No. 05-3165 (RBK), 2008 WL 2684118, at *17 (D.N.J. July 2, 2008).

The Court quotes the pre-AIA version of 35 U.S.C. § 103, which governs here. See PAR Pharm., Inc. v. TWI Pharms., Inc., 773 F.3d 1186, 1193 n.6 (Fed. Cir. 2014) ("Pursuant to § 3(n)(1) of the America Invents Act ('AIA'), Pub. L. No. 112-29, amended § 103 applies to patent applications with claims having an effective filing date on or after March 16, 2013.").

(quoting *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007)); see also Amgen Inc. v. F. Hoffman-La Roche Ltd, 580 F.3d 1340, 1362 (Fed. Cir. 2009). The Supreme Court of the United States has warned, however, that while an analysis of any teaching, suggestion, or motivation to combine known elements is useful to an obviousness analysis, the overall obviousness inquiry must be expansive and flexible. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 415, 419 (2007).¹³

The Court should also, as part of its analysis on the question of obviousness, consider evidence regarding objective considerations of nonobviousness (sometimes also referred to as "secondary considerations of nonobviousness"). *In re Cyclobenzaprine Hydrochloride*Extended-release Capsule Patent Litig., 676 F.3d 1063, 1075-76 (Fed. Cir. 2012). An analysis of objective considerations of nonobviousness may not be deferred until after the fact finder makes an obviousness finding, nor should a fact finder shift the burden of proof at any point to the patentee (including when considering evidence of objective considerations). *Id.* at 1075-79. Instead, at all times, the party challenging the patent bears that burden, and must prove by clear and convincing evidence that the claim at issue of the patent is invalid. *Id.*

Obviousness is a question of law that is predicated on several factual inquiries, as set

In determining what would have been obvious to one of ordinary skill in the art, the use of hindsight is not permitted. *See KSR*, 550 U.S. at 421 (cautioning the trier of fact against "the distortion caused by hindsight bias" and "arguments reliant upon *ex post* reasoning" in assessing obviousness); *see also Pfizer Inc. v. Teva Pharm. U.S.A., Inc.*, 882 F. Supp. 2d 643, 664 (D. Del. 2012). Put another way, the task of determining whether a patent is invalid requires a court to "step back in time to before the moment of actual invention, and out of the actual inventor's shoes into those of a hypothetical, ordinary skilled person who has never seen the invention." *Eisai Co., Ltd. v. Teva Pharm. USA, Inc.*, No. 03 Civ. 9223(GEL), 2006 WL 2872615, at *2 (S.D.N.Y. Oct. 6, 2006) (citing *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983)).

forth in *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17 (1966). Specifically, the finder of fact must assess the following considerations (referred to as the *Graham* factors): (1) the scope and content of the prior art; (2) the differences between the claimed invention and the prior art; (3) the level of ordinary skill in the pertinent art; and (4) the aforementioned objective considerations of nonobviousness, such as commercial success, long-felt but unmet needs, the failure of others, etc. *Graham*, 383 U.S. at 17–18; *see also Daiichi Sankyo Co. v. Matrix Labs.*, *Ltd.*, 619 F.3d 1346, 1352 (Fed. Cir. 2010). Even if a reference is nonenabling, it can "potentially qualify as prior art for the purpose of determining obviousness[.]" *I/P Engine, Inc. v. AOL Inc.*, 576 F. App'x 982, 988-89 (Fed. Cir. 2014); *see also Geo. M. Martin Co. v. Alliance Mach. Sys. Int'l LLC*, 618 F.3d 1294, 1302 (Fed. Cir. 2010) ("Under an obviousness analysis, a reference need not work to qualify as prior art; it qualifies as prior art, regardless, for whatever is disclosed therein.") (internal quotation marks and citations omitted).

The parties' disputes relate in large part to independent claims 1 and 25, claims from which all other asserted claims depend. Alcatel argues that the MONET references disclose "connection to an optical access network." (D.I. 365 at 18) And if the Court were to disagree on that point, according to Alcatel, "it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to connect the transport network disclosed in the MONET articles to an access network." (*Id.* at 18-19; *see also* D.I. 414 at 9; Alcatel's "Motion for Summary Judgment of Invalidity" Presentation at Slide 41 (stating that "[i]t [w]ould [h]ave [b]een [o]bvious [t]o [c]onnect [t]he MONET [n]odes [t]o [a]n [a]ccess [n]etwork"))¹⁴

As Alcatel notes, for obviousness purposes, it is not disputed that it would be obvious to one of skill in the art to combine the disclosures of the four MONET articles. (D.I. 414 at 3 n.4)

To support its contention that the MONET references disclose connection to an access network, Alcatel cites to certain portions of the deposition testimony of Lambda's expert, David A. Smith, Ph. D. (*See* D.I. 365 at 18 (citing D.I. 370, ex. 19 at A333, A335-37)) While Dr. Smith acknowledges therein that the MONET articles disclose certain subsystems that *might be possible* to link to an access network, Alcatel stretches his testimony too far to the extent it characterizes it as describing an actual, definitive connection. (*See* D.I. 392 at 13)¹⁶

For instance, in this cited deposition testimony, Dr. Smith explained that the Wagner reference discloses adding wavelengths from a transport network and dropping them into a SONET multiplexer, which signals "could become signals on a node in an optical access network." (D.I. 370, ex. 19 at A333) And as for the Gottlieb reference, when asked if it discloses an access network, Dr. Smith testified that it "discloses add/drop capability to an OC48 ADM" which "can be a node in an optical network." (*Id.* at A335) Lambda concedes that "Dr. Smith agreed that the OC-48 'could' be connected to an access network." (D.I. 392 at 13 (citing D.I. 397, ex. 45 at A917 (Dr. Smith explaining that figures in Wagner and Johnson show a connection to OC-48 equipment)) But again, on the record before the Court, it does not appear that Dr. Smith acknowledged during his deposition that the subsystems disclosed in the MONET references were actually connected to an access network.

In the anticipation section of its briefing, Alcatel also asserts that the Anderson article itself actually discloses a connection to an access network like that claimed in the patent, in disclosing "video equipment that generated signals passed through a switch prior to reaching the MONET Network node." (D.I. 414 at 5-6) Anderson discusses the various experiments that were performed during the five-year MONET research project, including an experiment where a high definition television ("HDTV") transmission was sent into the optical network. (D.I. 307, ex. 5; see also D.I. 392 at 10-12) Lambda, pointing to a portion of Anderson, argues that the HDTV testbed equipment that was generating input signals for the optical network "was directly connected" to the optical layer of MONET or to the non-compliant interface of the network element—and that therefore Anderson "did not address the use of the claimed access network." (D.I. 392 at 11 (citing D.I. 370, ex. 5 at A054)) The Court concludes that on this issue, Lambda has presented evidence sufficient to create a genuine issue of material fact. The portion of the Anderson reference in dispute, (D.I. 370, ex. 5 at A054), could be read to suggest only the type of "direct connection" that Lambda claims. And in asserting otherwise, Alcatel could have done more to make its argument clearer and stronger. For example, Alcatel does not cite to any specific word or phrase in the portion of Anderson that it asserts amounts to the disclosure of the key component at issue. (D.I. 414 at 6) And although the article does make reference to "prototype HDTV to ATM interfaces, the Tektronix Video Network Access Unit (VNAU) connected to Marconi/FORE ASX-4000 ATM switches with MONET compliant OC-48c port

Alcatel alternatively argues that it would have been obvious to the skilled artisan to connect the transport network disclosed in the MONET articles to an access network. (D.I. 365 at 18-19) Alcatel's support for this assertion is that "the articles disclose 'compliant client interfaces' which, one of ordinary skill would readily conclude, exist to connect to client networks. End-users do not interface directly with the long-haul transport networks carrying multiplexed data." (*Id.* at 19; see also Alcatel's "Motion for Summary Judgment of Invalidity" Presentation at Slide 41 (citing D.I. 370, ex. 4 (Johnson) at A025, A027; id., ex. 5 (Anderson) at A043)) However, Alcatel fails to demonstrate the absence of a triable fact with respect to obviousness for at least three reasons.

First, Alcatel offers no expert testimony in support of this proposition. In light of the complex technology at issue here, the Court is not prepared to jump to conclusions as to what a skilled artisan would "readily conclude" on attorney argument alone. Second, Lambda asserts that the MONET references' usage of the term "client" does not suggest connections to access networks, but instead refer to "test equipment such as HDTV signal generators, a tape deck or computer workstations." (D.I. 392 at 18; *see also id.* at 12-13 (citations omitted)) And finally, even if true that it would have been obvious to one of ordinary skill in the art to connect the MONET nodes to an access network at the time of the claimed invention, Alcatel provides no articulation of why a skilled artisan would have had a reasonable expectation of success in doing so, (*see* D.I. 365 at 19; D.I. 414 at 9-10), a necessary showing by a party seeking to invalidate a

cards[,]" (D.I. 370, ex. 5 at A054), in its brief Alcatel points to no expert testimony to support the proposition that the reference sufficiently discloses something other than the "direct connection" to which Lambda refers, (D.I. 414 at 6).

patent, see Pfizer, Inc., 480 F.3d at 1361.

The Court's conclusion here is also buttressed by the evidence presented regarding objective considerations of nonobviousness. As the Federal Circuit has stated, "commercial success, long felt but unsolved needs, [and the] failure of others" are examples of objective considerations that "might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." *Graham*, 383 U.S. at 17-18. Lambda points to a number of objective considerations as relevant.

For example, Lambda cites to the eight agreements it made with other named Defendants to license the '229 patent, arguing that they demonstrate commercial success. (D.I. 392 at 19 (citing D.I. 396, exs. 15-22)) Such licenses may be considered as objective evidence of nonobviousness. See Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc., 617 F.3d 1296, 1304-05 (Fed. Cir. 2010); Halo Elecs., Inc. v. Pulse Elecs., Inc., No. 2:07cv-00331-PMP-PAL, 2013 WL 2319145, at *6 (D. Nev. May 28, 2013). Alcatel argues to the contrary that the licenses should be discounted, and in support notes that the licensing agreements explicitly state that they shall not be construed as an admission that the licensing companies' products practice the '229 patent claims. (D.I. 365 at 19) However, Alcatel cites to no case that has found that such a disclaimer disqualifies a license agreement from being considered in this context. Cf. Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc., 699 F.3d 1340, 1353 (Fed. Cir. 2012) (finding, in the context of an appeal from a district court grant of judgment as a matter of law, that "a reasonable jury could have found that [litigation] licenses reflect the value of the claimed invention and are not solely attributable to litigation"). And beyond that, Lambda does point to some evidence indicating that there was a

nexus between the amount paid for these licenses and the value of the alleged invention reflected in the patent-in-suit. (*See* D.I. 392 at 19 (citing D.I. 397, ex. 54 at A1012-15 (deposition testimony of Marc Frechette, who negotiated the licenses for Lambda, in which Mr. Frechette testifies that the amounts paid for the licenses were based on a variety of factors, including the number of allegedly infringing products being sold and the price of those products); D.I. 395, ex. 8 at A110-11 (Alcatel's damages expert asserting that it was appropriate to look to the total licensing revenues related to the '229 patent as a "method of measuring the value" of the patent)); *see also Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004) (explaining that "affirmative evidence of nexus [is required] where the evidence of commercial success presented is a license, because it is often cheaper to take licenses than to defend infringement suits") (internal quotation marks omitted) (citing cases).

Additionally, Lambda sets forth significant evidence of the commercial success of Alcatel's allegedly infringing products. (D.I. 392 at 19 (citing D.I. 397, ex. 23 at A698, A701))

Such evidence is properly considered as a secondary consideration of nonobviousness. *See Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000)

("[C]ase law provides that the success of an infringing product is considered to be evidence of the commercial success of the claimed invention."). Alcatel does not dispute that its products achieved significant commercial success. Instead, the only argument it puts forward in response here is that Lambda cannot "bootstrap commercial success by saying [Alcatel's products] infringe when, in fact, [those products] don't infringe." (Tr. at 26) While Alcatel may later prove that all of its products that are at issue at trial do not infringe the '229 patent, the evidence put forth by Lambda as to such products may be considered at the summary judgment stage. *See*,

e.g., Smartflash LLC v. Apple Inc., CASE Nos. 6:13cv447-JRG-KNM, 6:13cv448-JRG-KNM, 2015 WL 660293, at *6-7 (E.D. Tex. Feb. 13, 2015) (considering evidence regarding the commercial success of the accused products on summary judgment, despite defendants' argument that their products did not practice the asserted claims).

Moreover, Dr. Smith points to evidence regarding the long felt, unmet need assertedly met by the '229 patent. (See D.I. 392 at 19-20 (citing D.I. 395, ex. 9 at A198); Tr. at 46-47) This evidence further helps demonstrate that there is a genuine issue of fact as to whether the '229 patent's asserted claims are obvious.

In sum, Alcatel's Motion does not satisfy its high burden of proving that the claimed invention would have been obvious to a skilled artisan at the time of the invention.¹⁷

IV. CONCLUSION

For the reasons set out above, the Court recommends that Defendants' Motion for Summary Judgment of Invalidity (D.I. 363) be DENIED.

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b)(2). The failure of a party to object to legal conclusions may result in the

Because the Court has found that summary judgment cannot be granted in Alcatel's favor with respect to independent claims 1 and 25, there is no need to address Alcatel's other obviousness-related argument regarding claims 15 and 16, which depend from claim 1. (D.I. 365 at 18; D.I. 414 at 10); see, e.g., Medtronic Vascular Inc. v. Abbott Cardiovascular Sys., Inc., 614 F. Supp. 2d 1006, 1027 (N.D. Cal. 2009) (denying motion for summary judgment on the issue of obviousness with respect to independent claims and concluding that "[s]ince dependent claims asserted as obvious by defendants all depend on independent claims . . . of the [asserted] patent[s] . . . , the same result follows with respect to these claims, too").

loss of the right to *de novo* review in the district court. *See Sincavage v. Barnhart*, 171 F. App'x 924, 925 n.1 (3d Cir. 2006); *Henderson v. Carlson*, 812 F.2d 874, 878–79 (3d Cir. 1987).

The parties are directed to the Court's Standing Order for Objections Filed Under Fed. R. Civ. P. 72, dated October 9, 2013, a copy of which is available on the District Court's website, located at http://www.ded.uscourts.gov.

Because this Report and Recommendation may contain confidential information, it has been released under seal, pending review by the parties to allow them to submit a single, jointly proposed, redacted version (if necessary) of the Report and Recommendation. Any such redacted version shall be submitted no later than **July 31, 2015** for review by the Court, along with a specific, detailed explanation as to why disclosure of any proposed redacted material would "work a clearly defined and serious injury to the party seeking closure." *Pansy v. Borough of Stroudsburg*, 23 F.3d 772, 786 (3d Cir. 1994) (internal quotation marks and citation omitted). The Court will subsequently issue a publicly-available version of its Report and Recommendation.

Dated: July 24, 2015

Christopher J. Burke
UNITED STATES MAGISTRATE JUDGE